## Aero 484: Computer-Aided Design

<table>
<thead>
<tr>
<th>COURSE #: AE 484</th>
<th>COURSE TITLE: COMPUTER AIDED DESIGN</th>
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<tr>
<td>TERMS OFFERED: Fall</td>
<td>PREREQUISITES: AERO 315, 325, 335, 345</td>
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<td>INSTRUCTOR(S): Washabaugh</td>
<td>SCIENCE/DESIGN CREDITS: 1/3 (elective course)</td>
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### CATALOG DESCRIPTION:
Advanced computer-aided design. Students learn about computer generation of geometric models, calculation of design parameters, trade-off diagrams, and finite-element modeling and analysis. Each student carries out a structural component design using industry-standard software. The course includes individual and team assignments.

### COURSE TOPICS:
1. Teaching and communication methods.
2. System and component design trades.
4. Computer aided design tool for structures, Dynamics, and Fluids.

### COURSE OBJECTIVES
- Have student work in effective teams.
- Employ both written and oral communication skills.
- Employ corporate and system trade of diagrams for both continuous and discreet elements.
- Use commercial CAD software.

### COURSE OUTCOMES
On completion of Aero 484, students can:
- Effectively work in teams. (Assessed by: 2,3,4)
- Write a product specification and identify design drives. (Assessed by: 1,2,3,4,5)
- Perform component and system level design. (Assessed by: 1,2,3,4,5)

### ASSESSMENT TOOLS
- Individual homework.
- Written reports.
- Oral presentation.
- Project.
- Final exam.

Updated: May 2005